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News Summary

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Colleges' endowments have received a double boost from the stock and bond markets. Story on Page 3.

A 10-per-cent increase is anticipated this year in states' spending for student aid. Story and Fact-File on Pages 4 and 5.

The Chronicle Survey finds that colleges and universities increased aid to students by about 9 per cent in 1981-82, in spite of federal cutbacks. Story and Table on Pages 6 and 7.

Documentaries and new curricula are among the tools colleges are using to combat the problem of adult illiteracy. Story on Page 8.

Bowing to a federal court's order, Brigham Young University has turned over to the Internal Revenue Service the names of hundreds of donors. Story on Page 11.

Federal officials say they are drafting rules to minimize the paperwork colleges must undertake to carry out a law linking draft registration and student aid. Story on Page 11.

A new kind of insurance has been designed to protect colleges if auditors find improper use of student-aid money. Story on Page 14.

The Bollingen Series, inspired by the psychologist Carl Jung and consisting of more than 200 books in psychology, literature, mythology, and other fields, is nearing completion after 40 years. Story on Page 27.

Controversy is continuing in Israel over a requirement that foreign faculty members at Arab universities on the West Bank disavow support for the Palestine Liberation Organization. Story on Page 21.

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Colleges, States Weigh Rules to Make Tenure Harder to Get, Easier to Lose

By MALCOLM G. SCULLY

Changes that would make it harder for faculty members to earn tenure and easier for colleges to lay off those who already have it are being considered by several institutions and state systems of higher education.

The proposals would not eliminate tenure but would give colleges more flexibility in revising or eliminating academic programs at a time of dwindling resources and shifting student interests.

They are widely viewed as indications that the principle of academic tenure, which has always had its critics, will face intensified pressure over the next several years.

Several faculty organizations, including the American Association of University Professors, the American Federation of Teachers (A.F.L.-C.I.O.), and the National Education Association have expressed opposition to many of the proposed changes.

Matthew W. Finkin, chairman of the A.A.U.P.'s Committee A on Academic Freedom and Tenure, said that he was "terribly concerned" about some of the changes now being discussed.

Robert M. Nielsen, assistant to the president for higher education at the A.F.T., said, "There is no question that there is an effort to take advantage of the current fiscal crisis to do in tenure."

Layoffs of tenured faculty members are becoming more common. A story and a list of recent layoffs appears on Page 23.

Among recent developments:

▶ IN NEVADA: The state university

Continued on Page 24, Column 1

"Once you say that your tenure exists only so long as your program is popular, then you have no tenure at all."

—Matthew W. Finkin of the AAUP

National Teleconference Network to Link 66 Colleges This Week

By PAUL DESRUISSEAUX

An independent network formed by 66 colleges and universities to broadcast live conferences, seminars, and lectures across the country is offering its first program this week.

Through the National University Teleconference Network, continuing-education and extension programs at member institutions in 38 states and the District of Columbia will offer to their local constituents an opportunity to participate in programs being held at other universities in all parts of the country.

For example, a physician in Florida interested in a medical seminar being held at the Los Angeles County–University of Southern California Medical Center and broadcast over the network will go to the University of Miami to participate in it, via satellite and telephone links.

"The value of the teleconference is that it is live," says J. O. Grantham, director of extension programs at Oklahoma State University and chairman of the seven-member executive committee coordinating the project. "Our network will feature one-way video but two-way audio transmission, so that programming will be interactive. Those attending can do more than listen, they can actually participate" by asking questions of speakers following the presentations they have just delivered perhaps thousands of miles away.

This week's program, "Automated Office and Electronic Meetings for Today's Managers," will be an audio-only conference conducted over telephone lines. The first conference transmitted by satellite and broadcast over closed-circuit television will be next month.

The network was conceived last spring by a group of continuing-education spe-

Continued on Page 10, Column 1

Publishers Plan to Sue University over Copyrights

Defendants not named but will include scholars

By STACY E. PALMER

WASHINGTON

Citing "egregious abuses" of copyright law on college and university campuses nationwide, the Association of American Publishers revealed plans last week to sue a university, several individual scholars at that institution, and a commercial photocopying service it says have violated copyright regulations.

Association officials refused to name the university or other prospective defendants, but they said the action would be filed by mid-December.

Although the publishers' association has previously coordinated successful suits by publishers against the so-called "copy mills" that allegedly ignore copyright laws when photocopying books and articles for students and professors, its new suit would be its first legal action aimed directly at universities and professors for using illegally copied materials.

"This is a pervasive practice which must be stopped," said Carol A. Risher, director of copyright for the association.

Victory in Squibb Case

The impending suit follows a recent A.A.P. victory in a suit against the E. R. Squibb & Sons Corporation, a pharmaceutical company. In an out-of-court settlement, the company acceded to publishers' demands that royalty fees be paid when material is copied from technical journals—even if the articles are used for research purposes within the company.

Allan Wittman, chairman of the A.A.P. copyright committee, said the outcome of the Squibb case should "frighten people on and near campuses into understanding that publishers will defend their rights. They can't just throw material onto a copy machine and not pay the owners."

The publishers' association had previously won cases against the Gnomon Corporation, a photocopying service based in Cambridge, Mass., with outlets near Cornell, Pennsylvania State, and Yale

Continued on Page 25, Column 1

Presidents Lobbying NCAA Delegates

Among the 132 proposals on the agenda at next month's National Collegiate Athletic Association convention are several aimed at tightening academic standards. College presidents backing those proposals are asking their colleagues for support.

For summaries of all 132 proposals, see the "Athletics" section, Pages 15 to 20.

Endowments Buoyed by Rises in Value of Stocks, Bonds

By JACK MAGARRELL

College endowment funds have received a double-barreled boost from the increase in market values of both stocks and bonds during the past four months, a higher-education investment official said last week.

Rodney H. Adams, chairman of the investment committee of the National Association of College and University Business Officers and treasurer of Stanford University, said that endowment funds have benefited from the fact that they are usually more balanced between stocks and bonds than other investment funds.

On the average, colleges and universities have about 54 per cent of their endowments invested in stocks and about 46 per cent invested in bonds, according to NACUBO studies of endowment policies. Other investment funds, Mr. Adams said, tend to be more strongly committed to either stocks or bonds.

That balance of college investments eased the pain of a declining market earlier in the year, when bonds generally were performing better than common stocks. The balance then heightened the institutions' gains when the stock market began to make dramatic increases in August.

'A Dismal Year'

The market surge of the past few months has erased some of the discouragement seen in a preliminary report of the NACUBO investment committee's annual study of endowment investments.

The NACUBO report, which covered the 12-month period ending June 30, said that the endowment funds "appear to have had a dismal year."

For the year ending June 30, the 155 endowment funds included in the study showed a combined loss of 1.21 per cent in their net return. The net return is change in market value plus dividends and interest. If adjusted for an inflation rate of 6.8 per cent, as indicated by the Consumer Price Index for the same 12 months, the average net loss for endowments would be about 8 per cent.

Endowments are "not immune" to declining stock markets, Mr. Adams said. For the year ending June 30, stock indexes showed a net loss of about 12 per cent. The endowments' losses were smaller because of their investments in the bond market, which gained 6 per cent or more during the same period.

If the NACUBO report had been based on a 12-month period ending September 30 instead of June 30, Mr. Adams said, the figures would have looked much better.

At Stanford, for example, the net return on endowment investments for the 12 months ending June 30 was a gain of less than 1 per cent, he said, but for the 12 months ending September 30, the net gain was over 16 per cent.

Between June 30 and November 30, the market value of Harvard University's endowment rose from roughly $1.7-billion to $2-billion.

The market value of Princeton University's endowment rose from $885.8-million on June 30 to $1.082-billion on October 31.

Smoothing Formulas

Mr. Adams said the surge in stock prices would not result in any immediate, dramatic increases in spending from college endowment funds.

Most institutions use spending formulas that link withdrawals from their endowments to earnings and market values averaged over periods of three to five years.

Such formulas smooth out the ups and downs of short-term changes in the market, to produce a steadier flow of funds into college budgets.

Mr. Adams noted that many institutions try to spend less than their endowments earn, reinvesting part of the net return to offset inflation.

Because some colleges and universities have more than one endowment fund, 155 funds but only 137 participating institutions are included in the study of endowment performance.

The final report, with a detailed analysis of the endowment investments, is scheduled for publication by NACUBO next spring.

Endowments' Average Returns

	Average total return*			
	1 year	3 years	5 years	10 years
All endowments	− 1.21%	+ 8.11%	+ 7.60%	+ 5.01%
Size of endowment fund				
Over $50-million	− 1.68%	+ 8.92%	+ 8.35%	+ 5.08%
$10-million to $50-million	− 1.54%	+ 8.40%	+ 7.90%	+ 5.07%
Under $10-million	− 0.15%	+ 6.58%	+ 6.19%	+ 4.77%
Per cent in equity investments				
65% or more	− 6.62%	+ 8.20%	+ 8.01%	+ 5.01%
50% to 65%	− 1.38%	+ 8.70%	+ 8.05%	+ 5.00%
Under 50%	+ 3.46%	+ 7.37%	+ 6.79%	+ 5.01%
Comparative measures				
Equities				
Dow Jones Industrial Average	−11.70%	+ 4.86%	+ 3.45%	+ 3.70%
Standard & Poor's Industrials	−12.84%	+ 7.63%	+ 7.21%	+ 4.49%
Standard & Poor's 500	−11.76%	+ 7.66%	+ 7.19%	+ 4.79%
Bonds				
Salomon Brothers	+ 6.65%	− 4.06%	− 1.38%	+ 2.69%
Lehman Brothers–Kuhn Loeb	+ 9.04%	− 1.18%	+ 0.64%	—
Common Fund**				
Equities	−13.25%	+11.31%	+12.72%	+ 5.35%
Bonds	+10.98%	+ 0.10%	+ 2.30%	—
Consumer Price Index	+ 7.08%	+10.25%	+ 9.68%	+ 8.51%
Higher Education Price Index***	+ 9.92%	+ 9.88%	+ 8.81%	+ 7.80%

Note: Data are preliminary results of a study of 155 investment pools of 137 participating colleges and universities.
* Changes in market value, plus dividends and interest, for periods ending June 30, 1982.
** A nonprofit organization through which educational institutions pool investments.
*** An index of changes in prices paid by colleges and universities for goods and services developed by D. Kent Halstead, National Institute for Education.
— Not available.

SOURCE: NATIONAL ASSOCIATION OF COLLEGE AND UNIVERSITY BUSINESS OFFICERS

complaint brought by John Moore, a white member of the Albany State faculty who was passed over for the job.

Old Dominion President Censured by Faculty Senate

Old Dominion University's faculty senate has voted to censure President Alfred B. Rollins, Jr., for recommending to the university's board of visitors that two administrators be given tenure and faculty-rank promotions that had never been submitted to peer-review procedures described in the faculty handbook.

John Moore, an executive vice-president, and David Hager, acting vice-president for academic affairs, were promoted to full professor and granted tenure by the visitors last summer at Mr. Rollins's suggestion, a university spokesman said.

3 Colleges in Texas Consider Merging

Three black colleges in Texas are studying the feasibility of a merger to allow them to strengthen their financial base while maintaining their tradition of preparing black ministers.

The three church-related institutions—Wiley College, Texas College, and Huston-Tillotson College—have enrollments of about 600 students each. All three have been plagued with financial difficulties.

John M. Robinson, a lawyer who heads a commission studying the proposed merger, said several options would be considered, including closing two of the colleges and transferring all students to the remaining college, keeping all three open under a single administration, or keeping them open and dropping duplicate programs.

Duffey Under Fire at U. of Massachusetts

UNIVERSITY OF MASSACHUSETTS

Joseph D. Duffey, above, the new chancellor at the University of Massachusetts at Amherst, has been criticized by faculty members and state officials after the the university made a settlement with an assistant chancellor who had threatened to sue because her job was being changed.

Mr. Duffey, chancellor since October 1 and former chairman of the National Endowment for the Humanities, authorized a year's leave with full pay for Marie Reid after the black administrator, who served as director of the Office of Planning and Budget, threatened to sue for race and sex discrimination. Her $52,000 a year salary is one of the highest in the state system.

Some faculty members and other administrators have charged that Ms. Reid received favored treatment.

President Dismissed at College in South Carolina

Charles F. Ward, who was indicted in June on charges of obtaining property under false pretenses, has been dismissed as president of Trident Technical College in Charleston, S.C.

Mr. Ward had been placed on an unpaid "investigative leave" at the time of the indictment, which charged him with submitting improper travel-reimbursement vouchers.

Rutgers Accused of Fighting Bill to Raise Drinking Age

Supporters of legislation that would raise the legal age for consuming alcoholic beverages in New Jersey have charged that officials at Rutgers University are trying to block the measure in part because the campuses would lose income from their pubs.

In a letter to the governor, a group of citizens and local organizations called the Committee to Raise the Drinking Age also contended that Rutgers officials were being urged to oppose the bill by alcohol distillers who financed university programs.

A spokesman said neither the university nor the Center for Alcohol Studies, the only program that receives industry funding, has taken an official position on the bill, although some individuals from the university have testified on the legislation.

The bill, which would raise the drinking age from 19 to 21, has been stalled in a legislative committee since last summer.

Notes

The University of Virginia has withdrawn its sanction of "Easters," a weekend party in April that in recent years has drawn at least 25,000 people to Charlottesville and brought complaints of drunkenness and property damage from police and city residents. A university official cited those complaints and a "potential for tragedy" as reasons for the decision. . . . Stanford University has established a center to handle distribution of computer programs developed by faculty members to colleagues, to commercial companies for their own use, and to commercial distributors for marketing on behalf of the university. Since 1980, the university has earned nearly $1.3-million from the software, officials said.

Notes on . . . Radio & TV

A $25,000 grant has been given to the Association for Media-Based Continuing Education for Engineers by the International Business Machines Corporation to study the feasibility of setting up a "National Technological University." The university would award engineering degrees to students who take courses via television or in other nontraditional settings. Lionel Baldwin, dean of engineering at Colorado State University, will direct the study.

The university would offer graduate degrees to students unable to meet normal university residency requirements.

The association is an Atlanta-based consortium of 23 universities formed in 1976 to improve the effectiveness of continuing education for engineers.

▪

More than 35,000 students have enrolled this fall for television courses distributed by the Public Broadcasting Service's Adult Learning Service—an increase of 37 per cent over enrollment last fall, according to a P.B.S. announcement.

The service's courses are being offered for credit by more than 400 colleges and universities in cooperation with about 220 public television stations.

▪

Four proposals to produce nontraditional university-level courses will share an additional $3-million from the Corporation for Public Broadcasting–Annenberg School of Communications Project. The project, financed by Walter H. Annenberg, publisher of *TV Guide*, hopes to demonstrate that courses of high quality can be produced using television and other nontraditional "delivery systems."

The four projects and the amounts of their new grants are:

▶ "The Brain" produced by WNET-TV in New York, $1.3-million.

▶ "We the People," a course on Congress, produced by WETA-TV in Washington, $400,000.

▶ "The Mechanical Universe," produced by the California Institute of Technology, $1.1-million.

▶ "Visual Mathematics," produced by the Educational Development Center, Inc., and the Consortium for Mathematics and Its Applications, $200,000.

Mr. Annenberg has pledged $150-million over 15 years to support the project.

▪

Total income for public radio and television stations failed to keep pace with inflation in the 1981 fiscal year, according to a preliminary report from the Corporation for Public Broadcasting.

Income from all sources totaled $759.8-million in 1981, an increase of 7.8 per cent over fiscal 1980, the report said. However, when adjusted for inflation, the total was actually 2 per cent less than 1980 income, it added.

The report said 10.5 per cent of the stations' income came from public colleges and universities and 2.5 per cent from private institutions.

—MALCOLM G. SCULLY

Student Aid from States Expected to Jump 10 Pct. This Year

By JANET HOOK

State spending for grants to needy college students is expected to increase by almost 10 per cent this year—the largest increase since 1978-79—according to a survey by the National Association of State Scholarship and Grant Programs.

The survey also found that a growing number of states have responded in the past year to expected reductions in federal student assistance by proposing or setting up new loan, work-study, and grant programs.

Based on its annual survey of state scholarship programs, the association estimates that state expenditures for grants to undergraduates will increase 9.9 per cent—from $890.6-million last year to $978.5-million in 1982-83.

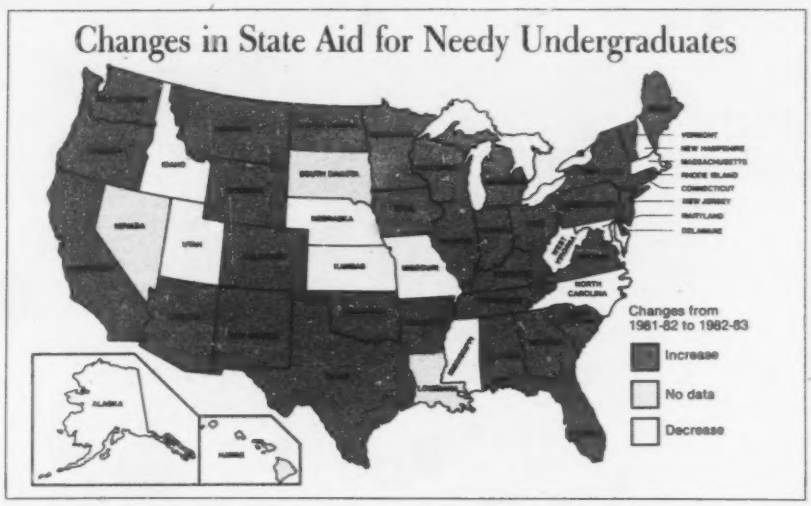
One author of the report on the survey noted that, because the survey is based on preliminary estimates, actual spending this year may fall short of the projected total.

The increase in state spending this year is expected to be coupled with a 3.8-percent increase in the number of undergraduates receiving grants—from 1.21 million last year to 1.256 million in 1982-83.

While state student aid is expected to increase nationwide, 12 states said spending for their scholarship programs would be reduced this year. Thirty-four states expect increases, and information was not available for four states.

Much of the growth is concentrated in states with large programs, said the report on the survey by Kenneth R. Reeher, executive director of the Pennsylvania Higher Education Assistance Agency, and Jerry S. Davis, director of research and policy analysis at the Pennsylvania agency.

The 11 states with the largest programs account for over three-quarters of the expected increase in state spending, the report said.



Pennsylvania, which runs one of the largest programs, has increased appropriations for student grants by $7-million to $80-million this year—the largest annual increase since 1968. Coupled with a slight decline in applications for grants, the increased budget has allowed Pennsylvania to provide more aid to middle-income students and to increase the average state grant by about $100.

But in many states with smaller programs—those that award less than $5-million a year—little or no growth is expected. State support for those programs has been slowing over the past two years, Mr. Davis said, noting that only about one-third of the 31 states with small grant programs have increased spending since 1980-81. That lack of growth, he said, suggests that most of those states would not be willing or able to make up for major losses of federal aid to their students.

Many of the smaller programs are heavily dependent on federal funds provided through the State Student Incentive Grant program, in which money is awarded to states if they at least match the federal contribution. Asked about the potential effects of a Reagan Administration proposal to eliminate the incentive grants, four states responding to the survey said their programs would not survive and 24 said they would probably have to reduce the size or number of grants.

Mr. Davis also said there had been "significantly more activity" than last year among states in response to cutbacks in federal student aid. Florida and New Mexico have established their own work-study programs to supplement the federal program, which has been trimmed by 4 per cent in academic 1982-83. New work-study programs are being considered by nine other states: Delaware, Indiana, Kentucky, New Jersey, North Dakota, Oregon, Tennessee, Vermont, and Virginia.

In other actions:

▶ Legislation allowing the sale of state revenue bonds to raise capital for low-interest student loans has been approved in Iowa, Maryland, and Rhode Island within the last year. Several other states are considering similar laws.

▶ Colorado, in an effort to stimulate private support for student aid, has set up a $250,000 pilot program to match private contributions with state funds.

▶ Arkansas and Tennessee are considering new scholarship programs that would provide aid on the basis of academic merit rather than financial need.

▶ Alabama is considering establishing a new agency that would provide additional funds for student loans by buying loans from banks. Several other states have already set up such agencies—known as secondary markets—modeled on the federal Student Loan Marketing Association, which purchases loans nationwide.

While most of the state programs surveyed provide aid to undergraduates on the basis of financial need, the survey also found that $17.8-million was expected to be awarded to needy graduate and professional students—up 4.4 per cent from last year. Of the 21 states reporting that they had such programs for graduate students, only four—California, Michigan, New York, and Texas—said they expected to spend more than $1-million.

The survey also found that about $101-million was expected to be spent on undergraduate grants that are not awarded on the basis on financial need—spending that will be concentrated in a handful of states.

State Financial Assistance for Graduate Students

	Number of awards		Dollars paid out		
	1982-83*	1-year change	1982-83*	1-year change	Average*
Alabama					
Student assistance	58	+163.6%	$ 35,000	+250.0%	$ 603
Arizona					
Incentive grants	151	+ 1.3%	113,000	+ 4.6%	748
California					
Bilingual teacher development	323		1,080,000		
Fellowships	652		2,548		
All **California** programs	975	−21.1%	3,628,000	− 9.6%	3,721
Colorado					
Graduate grants	n/a		608,000	+ 3.6%	1,216
Connecticut					
State supplemental grants	n/a		n/a		n/a
Delaware					
Postsecondary scholarships	126	+ 7.7%	81,000	+ 9.5%	643
Florida					
Seminole/Miccosukee Indian scholarships	8	+14.3%	6,000	+20.0%	750
Idaho					
Incentive grants	27		12,000	− 7.7%	444
Kansas					
Osteopathic scholarships and loans	15		141,000		9,400
Maryland					
Senatorial grants	148		55,000		
Family-practice medicine grants	n/a		33,000		
Professional school grants	n/a		150,000		
Nursing grants	n/a		60,000		
All **Maryland** programs	148		298,000	+11.9%	n/a
Massachusetts					
General scholarships	676		431,000		
Medical and dental scholarships	n/a		400,000		
All **Massachusetts** programs	676	− 3.7%	831,000	− 0.8%	n/a
Michigan					
Tuition grants	1,122	−35.4%	$1,368,000	+28.2%	$1,219
New Jersey					
Educational opportunity grants	348	− 2.2%	807,000	−12.1%	2,319
New York					
Tuition assistance	18,000	+ 2.9%	6,052,000	+ 5.8%	336
North Carolina					
Medical scholarships	57		500,000		
Dental scholarships	19		138,000		
Minority presence scholarships	n/a		360,000		
All **North Carolina** programs	86	+ 8.9%	998,000	+ 9.3%	n/a
Oklahoma					
Tuition aid**	n/a		n/a		
Minority assistance awards	31		155,000		
All **Oklahoma** programs	31		155,000		5,000
Oregon					
Foreign student fee remission	204		180,000		
Medical and dental grants	340		435,000		
All **Oregon** programs	544	+ 9.7%	615,000	−13.4%	1,131
Texas					
Tuition equalization grants	1,800		1,931,000		
Public education grants**	n/a		n/a		
All **Texas** programs	1,800	+ 1.5%	1,931,000	+24.3%	n/a
Utah					
Incentive grants**	n/a		n/a		n/a
Wisconsin					
Indian student assistance	10		9,000		900
Wyoming					
Incentive grants	21	+250.0%	36,000	+300.0%	1,714
All need-based programs	**24,896**	**− 1.0%**	**$17,760,000**	**+ 4.4%**	**$ 719**

* Estimated.
** Data could not be broken down into graduate versus undergraduate categories.
n/a not available.
Note: Data reported do not represent all state-supported financial aid to students, but only those funds distributed through the identified programs. Totals include 1981-82 appropriations where 1982-83 figures are not available.

SOURCE: NATIONAL ASSOCIATION OF STATE SCHOLARSHIP AND GRANT PROGRAMS

FACT-FILE

State Funds for Undergraduate Student Aid

	Number of awards		Dollars paid out		
	1982-83*	1-year change	1982-83*	1-year change	Average*
Alabama					
Student assistance	2,832	+165.2%	$ 1,700,000	+237.0%	$ 600
Alaska					
Educational incentive grants	155	−37.2%	234,000	−28.9%	1,510
Arizona					
Incentive grant	3,199	+ 1.5%	2,394,000	+ 4.9%	748
Arkansas					
State scholarships	10,377	+ 4.6%	2,335,000	+45.6%	225
California					
State grants	61,945		88,866,000		
Bilingual teacher development	455		1,334,000		
Law-enforcement personnel dependents	7		9,000		
All **California** programs	62,407	− 0.3%	90,209,000	+ 4.5%	1,446
Colorado					
Student incentive grants	n/a		2,094,000		
Student grants	8,800		5,377,000		
All **Colorado** programs	11,735	+10.3%	7,471,000	+ 2.7%	637
Connecticut					
State scholarships	2,200		2,300,000		
Scholastic achievement grants	800		560,000		
Private college student contracts	n/a		n/a		
State supplemental grants	n/a		n/a		
All **Connecticut** programs	11,450	− 1.6%	9,024,000	+ 2.6%	788
Delaware					
Postsecondary scholarships	927	+ 7.9%	593,000	+ 9.0%	640
District of Columbia					
Incentive grants	n/a		n/a		n/a
Florida					
Student assistance grants	18,000		14,036,000		
Seminole/Miccosukee Indian Scholarships	33		24,000		
All **Florida** programs	18,033	+27.8%	14,060,000	+14.1%	780
Georgia					
Incentive grants	16,817	+32.8%	4,645,000	+33.0%	276
Hawaii					
Incentive grants	n/a		n/a		n/a
Idaho					
Incentive grants	873	− 1.6%	481,000	− 3.0%	551
Illinois					
Monetary awards	92,000		94,896,000		
Student-to-student matching grants	1,385		275,000		
All **Illinois** programs	93,385	− 2.2%	95,171,000	+ 6.2%	1,019
Indiana					
Higher educational awards	32,683		22,773,000		
Freedom of choice grants	7,465		6,677,000		
All **Indiana** programs	40,148	+11.4%	29,450,000	+43.1%	734
Iowa					
Scholarships	1,270		700,000		
Tuition grants	10,000		15,600,000		
Voc-tech tuition grants	3,300		992,000		
All **Iowa** programs	14,570	+10.5%	17,292,000	+10.6%	1,187
Kansas					
Scholarships	2,200		865,000		
Tuition grants	4,200		4,125,000		
All **Kansas** programs	6,400		4,990,000	− 0.3%	780
Kentucky					
Incentive grants	4,018		3,289,000		
Tuition grants	4,000		3,267,000		
All **Kentucky** programs	18,018	+10.5%	6,556,000	+ 3.7%	364
Louisiana					
Incentive grants	n/a		n/a		n/a
Maine					
Incentive grants	1,050	−32.3%	550,000	+ 2.4%	524
Maryland					
General state scholarships	5,000		3,100,000		
Senatorial grants	7,252		2,675,000		
Proprietary school grants	180		100,000		
Teacher of deaf development	n/a		5,000		
Aid to children of deceased firemen	8		6,000		
All **Maryland** programs	12,440	+ 0.8%	5,886,000	− 0.6%	n/a
Massachusetts					
General scholarships	25,324	− 3.7%	16,805,000	− 1.6%	664
Michigan					
Competitive scholarships	18,644		15,155,000		
Tuition grants	12,903		15,732,000		
All **Michigan** programs	31,547	−19.2%	30,887,000	+ 7.9%	979
Minnesota					
Scholarships and grants	45,283		29,217,000		
Part-time grants	1,150		300,000		
AVTI tuition subsidy	6,100		1,400,000		
All **Minnesota** programs	52,533	+ 4.8%	30,917,000	+10.3%	589
Mississippi					
Incentive grants	2,400	+ 6.2%	1,247,000	− 5.6%	520
Missouri					
Student grants	11,000	+ 5.6%	$ 8,809,000	− 1.5%	$801
Montana					
Incentive grants	900		400,000	+ 2.6%	444
Nebraska					
Incentive grants	2,200	+10.1%	1,056,000	− 5.6%	480
Nevada					
Incentive grants	n/a		n/a		n/a
New Hampshire					
Incentive grants	1,500		532,000		
Nursing education grants	135		47,000		
All **New Hampshire** programs	1,635	− 1.0%	579,000	− 2.2%	354,000
New Jersey					
Tuition aid	50,526		37,815,000		
Educational opportunity grants	11,247		5,652,000		
Garden State scholarships	7,625		3,600,000		
All **New Jersey** programs	69,398	− 2.4%	47,067,000	+18.3%	678
New Mexico					
Incentive grants	1,500		1,000,000	+38.9%	667
New York					
Tuition assistance	342,000	+ 2.9%	296,548,000	+ 5.8%	867
North Carolina					
Incentive grants	n/a		3,198,000	− 3.1%	591
North Dakota					
Tuition assistance grants	520		211,000		
Student assistance	1,200		509,000		
All **North Dakota** programs	1,720	+ 3.1%	720,000	+ 7.1%	419
Ohio					
Instructional grants	67,000	+ 9.8%	33,856,000	+ 6.3%	505
Oklahoma					
Incentive grants**	17,500	+89.9%	9,000,000	+297.4%	514
Oregon					
Need grants	14,080		7,872,000		
Cash awards	800		485,000		
Foreign student fee remission	136		120,000		
All **Oregon** programs	15,016	− 0.6%	8,477,000	+10.5%	565
Pennsylvania					
State grants	122,750	− 0.5%	89,040,000	+14.8%	725
Rhode Island					
Scholarships and grants	10,348	+19.1%	6,823,000	+14.9%	659
South Carolina					
Private college tuition grants	7,500	− 6.4%	12,981,000	+ 2.8%	1,731
South Dakota					
Incentive grants	n/a		n/a		n/a
Tennessee					
Student assistance awards	19,733	+119.4%	10,038,000	+55.9%	509
Texas					
Tuition equalization grants	18,200		19,520,000		
Public education grants**	6,000		3,133,000		
Academic scholarships	400		250,000		
All **Texas** programs	24,600	+ 1.1%	22,903,000	+22.5%	n/a
Utah					
Incentive grants*	1,495	− 6.5%	1,094,000	− 6.6%	732
Vermont					
Incentive grants	7,350		6,470,000		
Part-time student grants	186		27,000		
All **Vermont** programs	7,536	− 2.2%	6,497,000	+17.5%	862
Virginia					
Scholarship assistance	20,442	+13.4%	4,068,000	+ 9.5%	200
Washington					
Need grants	10,443		6,423,000		
Assistance to blind students	4		2,000		
All **Washington** programs	10,447	−11.3%	6,425,000	+21.1%	615
West Virginia					
Higher education grants	5,220	−18.8%	4,195,000	− 2.4%	804
Wisconsin					
Tuition grants	8,900		10,783,000		
Higher education grants	33,000		11,354,000		
Indian student grants	1,040		891,000		
All **Wisconsin** programs	42,940	+ 5.1%	23,028,000	+10.6%	536
Wyoming					
Incentive grants	279	+244.4%	204,000	+316.3%	731
American Samoa					
Scholarships	n/a		n/a		n/a
Guam					
Professional/technical awards	n/a		n/a		n/a
Puerto Rico					
Incentive grants	n/a		n/a		n/a
Trust Territory					
Scholarships and grants	n/a		n/a		n/a
Virgin Islands					
Territorial grants	n/a		n/a		n/a
Incentive grants	n/a		n/a		n/a
All need-based programs	**1,256,220**	**+ 3.8%**	**$978,475,000**	**+ 9.9%**	**$779**

* Estimated.
** Data could not be broken down into graduate versus undergraduate categories.
n/a not available.
Note: Data reported do not represent all state-supported financial aid to students, but only those funds distributed through the identified programs. Totals include 1981-82 appropriations where 1982-83 figures are not available.

SOURCE: NATIONAL ASSOCIATION OF STATE SCHOLARSHIP AND GRANT PROGRAMS

CHRONICLE SURVEY

Undergraduate Student Aid in College Budgets, 1981-82

Private institutions

	Average amount (b)	1-year change (c)	As per cent of all aid: Average (d)	High (e)	Low (f)	As per cent of tuition (a): Average (d)	High (e)	Low (f)
Ph.D.-granting universities								
Pell grants	$ 775,719	−13%	5%	6%	4%	3%	4%	2%
Supplemental grants	359,004	− 2%	2%	3%	1%	1%	2%	1%
State grants	1,190,601	+ 7%	7%	12%	2%	5%	9%	1%
Institutional grants*	533,137	+ 7%	3%	4%	1%	2%	3%	1%
Total need-based grants	2,519,600	+12%	18%	24%	11%	11%	16%	6%
National Direct Student Loans	939,649	− 3%	6%	9%	3%	4%	5%	2%
Total loans**	2,983,067	+11%	17%	23%	10%	10%	15%	5%
Student earnings***	699,439	− 7%	4%	7%	2%	3%	4%	1%
Total need-based aid	8,410,868	+ 7%	52%	62%	41%	32%	45%	18%
Total non-need-based aid	7,988,105	+18%	44%	54%	35%	28%	40%	16%
Total aid	17,163,272	+13%	100%	100%	100%	63%	81%	45%
Gross tuition and fees	29,266,296	+13%	187%	256%	118%	100%	100%	100%
Comprehensive institutions								
Pell grants	678,170	−11%	11%	17%	5%	8%	13%	2%
Supplemental grants	196,304	+ 2%	3%	5%	1%	2%	3%	1%
State grants	758,720	+ 2%	11%	18%	4%	8%	13%	3%
Institutional grants*	250,138	+19%	4%	7%	1%	2%	4%	1%
Total need-based grants	1,046,878	+10%	17%	27%	8%	10%	14%	6%
National Direct Student Loans	335,576	−18%	5%	7%	3%	3%	4%	2%
Total loans**	1,897,787	+23%	28%	44%	13%	18%	27%	9%
Student earnings***	390,590	− 1%	7%	10%	4%	5%	7%	2%
Total need-based aid	4,532,169	+10%	68%	84%	52%	47%	64%	30%
Total non-need-based aid	1,854,232	+20%	28%	44%	13%	18%	28%	8%
Total aid	6,762,288	+12%	100%	100%	100%	67%	86%	49%
Gross tuition and fees	10,307,304	+13%	167%	215%	118%	100%	100%	100%
Selective liberal-arts colleges								
Pell grants	216,406	−18%	5%	5%	4%	3%	3%	2%
Supplemental grants	134,808	+ 4%	3%	4%	1%	1%	2%	1%
State grants	207,757	− 4%	4%	8%	1%	3%	5%	0%
Institutional grants*	683,006	+13%	14%	19%	8%	7%	10%	4%
Total need-based grants	1,561,991	+26%	31%	38%	25%	18%	22%	13%
National Direct Student Loans	195,815	−15%	4%	5%	3%	2%	3%	1%
Total loans**	828,461	+27%	17%	22%	11%	9%	12%	6%
Student earnings***	280,974	+ 6%	6%	7%	4%	3%	4%	2%
Total need-based aid	3,062,268	+18%	62%	70%	54%	35%	43%	26%
Total non-need-based aid	1,597,332	+21%	34%	42%	27%	19%	24%	14%
Total aid	4,846,753	+19%	100%	100%	100%	56%	65%	47%
Gross tuition and fees	8,795,368	+18%	188%	215%	161%	100%	100%	100%
Less selective liberal-arts colleges								
Pell grants	305,329	−10%	14%	20%	8%	12%	18%	5%
Supplemental grants	81,855	− 1%	4%	6%	2%	3%	5%	1%
State grants	221,068	+ 6%	10%	16%	4%	8%	14%	2%
Institutional grants*	77,020	+23%	5%	9%	1%	3%	6%	1%
Total need-based grants	291,020	+10%	16%	25%	7%	11%	16%	6%
National Direct Student Loans	117,698	−19%	5%	8%	3%	4%	7%	2%
Total loans**	447,107	+16%	25%	39%	11%	19%	28%	9%
Student earnings***	170,372	− 3%	8%	12%	4%	7%	11%	2%
Total need-based aid	1,434,179	+ 4%	72%	86%	58%	56%	71%	41%
Total non-need-based aid	530,863	+42%	26%	40%	12%	20%	30%	9%
Total aid	2,001,624	+11%	100%	100%	100%	77%	94%	59%
Gross tuition and fees	2,610,878	+16%	140%	171%	109%	100%	100%	100%
2-year colleges								
Pell grants	216,936	− 6%	21%	31%	11%	26%	41%	12%
Supplemental grants	49,565	+ 3%	4%	5%	3%	4%	6%	3%
State grants	103,603	− 7%	8%	14%	2%	10%	17%	3%
Institutional grants*	73,118	+42%	8%	15%	1%	10%	19%	1%
Total need-based grants	165,530	+27%	14%	21%	7%	18%	28%	8%
National Direct Student Loans	50,740	−23%	3%	5%	2%	4%	5%	3%
Total loans**	403,532	+30%	25%	39%	10%	28%	42%	14%
Student earnings***	103,098	+ 1%	10%	14%	6%	12%	18%	7%
Total need-based aid	999,614	+11%	79%	97%	62%	95%	122%	68%
Total non-need-based aid	230,225	+12%	16%	28%	4%	19%	34%	4%
Total aid	1,280,020	+11%	100%	100%	100%	120%	131%	106%
Gross tuition and fees	1,146,836	+12%	85%	93%	76%	100%	100%	100%
All private institutions								
Pell grants	347,901	−10%	14%	20%	8%	13%	20%	6%
Supplemental grants	111,116	+ 1%	3%	5%	2%	3%	4%	2%
State grants	315,050	+ 1%	9%	15%	3%	8%	13%	2%
Institutional grants*	198,978	+24%	7%	11%	2%	5%	9%	1%
Total need-based grants	640,724	+16%	18%	26%	10%	13%	19%	7%
National Direct Student Loans	185,543	−18%	5%	7%	3%	4%	5%	2%
Total loans**	808,860	+21%	24%	37%	11%	19%	28%	9%
Student earnings***	226,396	− 1%	8%	11%	4%	7%	11%	3%
Total need-based aid	2,321,315	+ 8%	71%	85%	57%	59%	77%	42%
Total non-need-based aid	1,176,497	+29%	26%	39%	14%	20%	30%	9%
Total aid	3,636,286	+12%	100%	100%	100%	82%	97%	66%
Gross tuition and fees	5,503,880	+15%	140%	169%	110%	100%	100%	100%

Public institutions

	Average amount (b)	1-year change (c)	As per cent of all aid: Average (d)	High (e)	Low (f)	As per cent of tuition (a): Average (d)	High (e)	Low (f)
Ph.D.-granting universities								
Pell grants	$ 3,435,016	− 5%	12%	15%	10%	15%	20%	10%
Supplemental grants	582,248	+ 4%	2%	3%	1%	2%	4%	1%
State grants	1,300,610	− 2%	3%	5%	1%	4%	6%	2%
Institutional grants*	688,557	+ 6%	3%	5%	0%	3%	5%	1%
Total need-based grants	1,699,178	+ 6%	5%	6%	3%	6%	8%	4%
National Direct Student Loans	1,341,944	−15%	5%	6%	3%	6%	8%	4%
Total loans**	9,380,320	+16%	29%	46%	13%	40%	69%	12%
Student earnings***	1,659,651	+ 1%	5%	7%	3%	6%	10%	3%
Total need-based aid	17,877,705	+ 7%	56%	73%	39%	74%	109%	39%
Total non-need-based aid	11,580,055	+13%	42%	59%	25%	50%	70%	30%
Total aid	29,955,305	+ 9%	100%	100%	100%	126%	155%	97%
Gross tuition and fees	25,273,693	+22%	87%	106%	68%	100%	100%	100%
Comprehensive institutions								
Pell grants	1,621,404	− 6%	30%	50%	9%	30%	42%	18%
Supplemental grants	208,402	+ 4%	3%	5%	0%	3%	6%	1%
State grants	553,877	+ 2%	5%	8%	1%	6%	11%	2%
Institutional grants*	257,441	+ 9%	3%	6%	0%	3%	4%	1%
Total need-based grants	510,020	+ 2%	5%	9%	1%	6%	11%	2%
National Direct Student Loans	428,966	−15%	5%	8%	2%	6%	10%	3%
Total loans**	2,136,967	+27%	21%	35%	6%	30%	58%	3%
Student earnings***	639,549	− 1%	10%	16%	3%	11%	19%	4%
Total need-based aid	5,364,250	+ 7%	60%	79%	40%	81%	121%	41%
Total non-need-based aid	4,953,917	+14%	39%	59%	19%	61%	102%	20%
Total aid	10,249,278	+10%	100%	100%	100%	142%	192%	92%
Gross tuition and fees	7,813,049	+17%	92%	137%	48%	100%	100%	100%
2-year colleges								
Pell grants	949,043	− 2%	38%	56%	20%	32%	46%	17%
Supplemental grants	118,523	− 7%	5%	10%	1%	4%	8%	1%
State grants	126,674	+ 1%	6%	9%	2%	5%	8%	2%
Institutional grants*	24,853	+ 6%	1%	3%	0%	1%	2%	0%
Total need-based grants	163,492	− 7%	6%	11%	2%	5%	9%	2%
National Direct Student Loans	74,347	−32%	3%	6%	0%	3%	5%	0%
Total loans**	545,800	+ 6%	19%	32%	5%	19%	35%	3%
Student earnings***	314,718	+ 7%	12%	20%	3%	11%	19%	2%
Total need-based aid	2,423,759	0%	74%	93%	55%	75%	110%	40%
Total non-need-based aid	780,763	+ 8%	25%	43%	7%	27%	51%	3%
Total aid	3,193,480	+ 2%	100%	100%	100%	102%	147%	56%
Gross tuition and fees	3,694,999	+12%	153%	241%	66%	100%	100%	100%
All public institutions								
Pell grants	1,347,533	− 3%	33%	51%	16%	30%	43%	17%
Supplemental grants	183,224	− 3%	4%	8%	1%	4%	7%	1%
State grants	345,862	+ 1%	5%	9%	2%	5%	9%	2%
Institutional grants*	145,626	+ 7%	2%	4%	0%	2%	3%	0%
Total need-based grants	391,006	− 3%	6%	10%	2%	6%	9%	2%
National Direct Student Loans	280,730	−26%	4%	6%	1%	4%	7%	1%
Total loans**	1,745,609	+12%	20%	34%	6%	24%	44%	4%
Student earnings***	519,756	+ 5%	11%	18%	3%	11%	18%	3%
Total need-based aid	4,565,126	+ 3%	69%	88%	50%	76%	113%	40%
Total non-need-based aid	2,851,226	+10%	30%	49%	12%	38%	66%	10%
Total aid	7,433,880	+ 5%	100%	100%	100%	115%	160%	70%
Gross tuition and fees	6,688,337	+14%	131%	201%	61%	100%	100%	100%

All institutions, public and private

	Average amount (b)	1-year change (c)	As per cent of all aid: Average (d)	High (e)	Low (f)	As per cent of tuition (a): Average (d)	High (e)	Low (f)
Pell grants	$ 813,729	− 7%	23%	34%	11%	21%	31%	11%
Supplemental grants	144,718	− 1%	4%	6%	1%	3%	6%	1%
State grants	329,409	+ 1%	7%	12%	3%	7%	11%	2%
Institutional grants*	174,116	+16%	4%	8%	1%	3%	6%	1%
Total need-based grants	524,355	+ 7%	12%	19%	6%	10%	15%	5%
National Direct Student Loans	229,900	−22%	4%	7%	2%	4%	6%	2%
Total loans**	1,245,385	+17%	22%	36%	9%	21%	36%	7%
Student earnings***	363,102	+ 2%	9%	14%	4%	9%	15%	3%
Total need-based aid	3,366,931	+ 6%	70%	86%	53%	67%	94%	41%
Total non-need-based aid	1,956,921	+20%	28%	43%	13%	28%	47%	9%
Total aid	5,405,965	+ 9%	100%	100%	100%	97%	126%	68%
Gross tuition and fees	6,055,837	+14%	136%	184%	87%	100%	100%	100%

(a) Ratio of aid to gross tuition and fees may exceed 100 per cent in some instances because need for aid is based on room, board, and other costs as well as tuition.
(b) Average of amounts reported for fiscal year ending June 30, 1982.
(c) Change in average from fiscal 1981 to fiscal 1982.
(d) Average of the percentages reported by institutions in each category.
(e) About one-fifth of the institutions reported percentages higher than the "high" percentage (mean per cent plus one mean deviation).
(f) About one-fifth of the institutions reported percentages lower than the "low" percentage (mean per cent minus one mean deviation).
* From institutional funds restricted to use for student aid.
** Includes only institutionally administered loans; does not include guaranteed loans administered by off-campus lenders.
*** Includes work-study earnings and other institutionally administered employment funds.

Note: Totals include funds for which detail was not provided by some institutions.
Survey data are based on a stratified random sample of 150 public and 150 private colleges and universities. Technical inquiries about the survey design and sampling techniques should be addressed to John Minter Associates, P.O. Box 107, Boulder, Colo. 80306.

SOURCE: SURVEY FOR THE CHRONICLE BY JOHN MINTER ASSOCIATES

Aid to Students Increased Despite U.S. Cuts, Survey Finds

Colleges and universities have managed to increase financial aid to students during the past year, despite substantial reductions in federal funds, according to the Chronicle Survey.

Data based on reports from student-aid officials in a national sample of colleges and universities indicate an overall increase of 9 per cent in grants, loans, and other assistance administered by the institutions in 1981-82, compared with the previous year. During the same period, the amount of federal aid received through Pell Grants declined 7 per cent and the amount received through National Direct Student Loans declined 22 per cent, the survey found.

The reduction in federal loan funds did not deter the trend of students going increasingly into debt to pay for higher education.

The Chronicle Survey does not include most aid under the largest federal program, Guaranteed Student Loans, which is administered by off-campus lenders.

The survey did indicate that increases in loans administered by the colleges themselves were more than sufficient to offset the reduction in National Direct Student Loans. The net increase in loans administered by the institutions was 17 per cent. Such loans accounted for more than a fifth of all student aid.

Colleges increased by an average of 16 per cent the amount of grants made to students from institutional funds.

The increase in institutional grants was particularly strong at private institutions, with an average gain of 24 per cent, compared with 7 per cent at public institutions.

While student aid increased 9 per cent in 1981-82, institutional revenue from tuition and fees at all institutions increased 14 per cent.

The increases in tuition and aid were more closely matched at private institutions, where aid was up 12 per cent and tuition and fees were up 15 per cent. At public institutions, aid rose 5 per cent and tuition rose 14 per cent.

Private liberal-arts colleges with more selective admissions policies increased total student aid by 19 per cent, compared with an 18-per-cent increase in tuition revenue. Among private liberal-arts colleges that are less selective, student aid was up 11 per cent while tuition revenue rose 16 per cent.

The institutional category with the largest proportionate increase in tuition revenue was that of public Ph.D.-granting universities, where the average rose 22 per cent. Total student aid at those universities was up 9 per cent.

The reduction in federal funds from Pell Grants was more severe at private institutions than at public ones.

The average decline in Pell Grant funds was 10 per cent at private institutions and 3 per cent at public institutions.

For National Direct Student Loans the pattern was reversed, with private institutions reporting a decline of 18 per cent, compared with the public institutions' reduction of 26 per cent. Public two-year colleges reported a drop of 32 per cent in funds from National Direct Student Loans.

The survey was designed and conducted for *The Chronicle* by John Minter Associates, a research organization in Boulder, Colo., that specializes in higher-education studies.

The survey data were collected this fall from a stratified random sample of 150 public and 150 private colleges and universities.

—JACK MAGARRELL

College Housing for 24,000 Students Found Substandard

WASHINGTON

More than 24,000 students are living in substandard college housing, a national survey indicates.

The survey, sponsored by the Department of Education, defined substandard housing as that which fails to pass fire or health inspections; is structurally unsafe; has no usable flush toilets, bathtubs, or showers; or has insufficient hot and cold running water.

The students living in substandard college-operated housing in 1980-81 amounted to only 1 per cent of the estimated total of 2.4 million living in campus residences, the survey found. The proportion reported living in substandard conditions was twice as high at private institutions—1.4 per cent—as it was at public institutions—0.7 per cent.

Rehabilitation of housing facilities was given a high priority by the colleges and universities surveyed. Top priority for the next two years was given to rehabilitation by 40 per cent of the institutions; to energy-conservation projects by 29 per cent; to construction of new facilities by 21 per cent; and to other spending by 10 per cent.

Spending by colleges and universities on student housing in fiscal 1981 was estimated at $2.5-billion—an average of $1,078 per occupant.

In all, about 2,075 colleges and universities provide housing for students. At public institutions that provide such housing, an average of 32 per cent of students live there, compared with 53 per cent at private institutions.

At both public and private universities, the average student-housing occupancy rate exceeded the designed capacity of the facilities by 1 per cent. Occupancy at institutions other than universities, four-year and two-year, public and private, averaged about 95 per cent of capacity.

The monthly charges for college-owned housing in the fall of 1980 averaged $104 for single students and $162 for married students.

The survey was conducted for the Education Department by the American Council on Education. Data were obtained from 407 institutions that provide student housing. Copies of the survey report, *An Assessment of College Student Housing and Physical Plant*, are available from the Higher Education Panel, American Council on Education, One Dupont Circle, Washington 20036.

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If your needs include programming in PILOT, LOGO, BASIC or UCSD Pascal, the 64 will be able to run them all. Plus hundreds of programs in CP/M® with the optional Z80 microprocessor.

What all this amounts to is that the software available for the 64 will be virtually limitless.

VIDEO QUALITY THAT COMMANDS ATTENTION.

The 64 has exceptionally high video resolution, including 16 available colors, 3D Sprite graphics and a wide range of charts and graphs.

All of which combine to make the 64 as visually exciting a computer as you'll find anywhere.

And, while you might discourage it during school hours, the Commodore 64 will play an extensive assortment of game cartridges, besides running games which students can invent themselves.

SOUND TO TEACH OR ENTERTAIN.

The 64 has excellent sound effects in its game mode. As a music synthesizer, its sound is incredible.

It features a built-in ADSR (attack, decay, sustain, release) envelope, 3 voices (each with a 9-octave range) and 4 waveforms.

THE COMMODORE 64. ONLY $595.

FEATURES	COMMODORE 64	APPLE II+®
Base Price*	$595	$1530
Advanced Personal Computer Features		
Built-in User Memory	64K	48K
Programmable	YES	YES
Real Typewriter Keyboard	YES (66 keys)	YES (52 keys)
Graphics Characters (from Keyboard)	YES	NO
Upper and Lower Case Letters	YES	Upper Only
5¼" Disk Capacity Per Drive	170K	143K
Audio Features		
Sound Generator	YES	YES
Music Synthesizer	YES	NO
Hi-Fi Output	YES	NO
Video Features		
TV Output	YES	EXTRA
Input/Output Features		
"Smart" Peripherals	YES	NO
Software Features		
CP/M® Option	YES	YES

*Manufacturer's Suggested Retail Price: July 1, 1982. Disk drives and printers are not included in prices. The 64's price may change without notice.

And it can even show you your music note by note as you compose or play back, as well as being adaptable to playback through an audio system, so the whole class can hear what's going on.

SAVE NOW FOR A BETTER EDUCATION.

If you're looking to upgrade your present computers or buy computers for the first time, look long and hard at the Commodore 64.

Its combination of power, graphics, music and software makes it perfect for every application from pre-school to grad school.

And its price makes it perfect, period.

CP/M® is a registered trademark of Digital Research, Inc.

Commodore Business Machines
Personal Systems Division
P.O. Box 500
Conshohocken, Pennsylvania 19428

Please send me more information on the Commodore 64.™

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Position_____
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commodore COMPUTER

CHE 12-8

International Notes

Israeli Professors Escalate Protests over Salaries

Faculty members at Israeli universities held a two-day nationwide strike last week after last-minute negotiations with the Ministry of Finance failed to resolve a conflict over salary increases.

Officials of the faculty union said that the professors would strike every day this week if their demands for a 30-per-cent increase are not met.

The union has demanded that the universities abide by the decision of an outside arbitrator who set the increase at 30 per cent. University officials have said that the arbitrator overstepped his authority and that they cannot provide the salary increases unless the Ministry of Finance increases university budgets.

The faculty members originally had scheduled a four-day strike last week but canceled those plans after Zevulun Hammer, the Minister of Education, announced that he would intervene in an effort to bring about a quick resolution of the conflict.

However, discussions between Mr. Hammer and officials at the Ministry of Finance failed to produce an offer acceptable to the union, and its leaders then called the two-day strike.

Canadian Professor Tried as Spy by British

Hugh Hambleton, a professor of economics at Laval University in Quebec, has gone on trial in Great Britain on charges of espionage. The British government claims that Mr. Hambleton had been passing classified documents to the Soviet Union for nearly 30 years.

It adds that he was considered important enough to warrant a private meeting in 1975 with Yuri Andropov, the new Soviet leader who was then head of the K.G.B., the Russian intelligence agency.

Although Canadian police uncovered decoding equipment in Mr. Hambleton's home in Quebec City in 1979, the Canadian government has maintained that it did not have enough evidence to prosecute him under the country's Official Secrets Act.

Mr. Hambleton, who holds both Canadian and British citizenship, has not denied that he dealt with Soviet officials, but claims that he gave them only unclassified material. He was arrested last June upon his arrival in London for a vacation.

British Faculty Union Censures U. of Aston

Britain's Association of University Teachers has called on its 35,000 members to boycott the University of Aston in Birmingham because the university has declared its intention to dismiss faculty members. Aston is the first British university to resort to dismissals as a result of spending cuts announced by the University Grants Committee in July, 1981.

The union acted after the university's governing council voted, 19 to 17, to authorize Vice-Chancellor Frederick Crawford to issue dismissal notices.

FACT-FILE

Foreign Students in U.S. Institutions

Institutions with Largest Enrollment

Rank	Institution	Number of foreign students	Proportion of total enrollment
1.	Miami-Dade Community College	4,622	12.5%
2.	University of Southern California	3,434	12.4%
3.	Columbia University and Teachers College, and Barnard College	3,103	13.0%
4.	University of Wisconsin at Madison	2,519	6.0%
5.	Boston University	2,332	8.3%
6.	University of Texas at Austin	2,327	4.8%
7.	Texas Southern University	2,190	26.7%
8.	University of Michigan at Ann Arbor	2,187	6.1%
9.	University of California at Los Angeles	2,163	6.2%
10.	Northeastern University	2,110	5.0%
11.	George Washington University	2,014	9.4%
12.	New York University	2,004	6.0%
13.	University of Minnesota at Minneapolis-St. Paul	1,986	3.0%
14.	Southern Illinois University at Carbondale	1,982	8.3%
15.	State University of New York at Buffalo	1,977	8.2%
16.	Ohio State University, main campus	1,967	3.7%
17.	Harvard University	1,958	9.2%
18.	Massachusetts Institute of Technology	1,946	20.5%
19.	University of Miami	1,899	13.0%
20.	Indiana University at Bloomington	1,868	5.8%
21.	University of California at Berkeley	1,867	6.1%
22.	University of Southwestern Louisiana	1,845	11.9%
23.	Louisiana State University and A&M at Baton Rouge	1,828	6.0%
24.	University of Pennsylvania	1,807	8.1%
25.	Oklahoma State University, main campus	1,775	7.8%
26.	University of Houston, central campus	1,757	6.2%
27.	University of Florida	1,739	5.1%
28.	Stanford University	1,739	12.8%
29.	University of Pittsburgh, main campus	1,685	5.8%
30.	University of San Francisco	1,680	29.5%
31.	Iowa State University	1,667	6.8%
32.	University of Kansas	1,642	6.8%
33.	University of Oklahoma at Norman	1,634	7.5%
34.	North Texas State University	1,626	9.3%
35.	California State University at Los Angeles	1,619	7.1%
36.	American University	1,610	13.4%
37.	University of Illinois at Urbana-Champaign	1,608	4.6%
38.	Howard University	1,583	12.6%
39.	Texas A&M University, main campus	1,559	4.4%
40.	Michigan State University	1,502	3.3%
41.	University of Arizona	1,454	4.6%
42.	Brigham Young University, main campus	1,453	4.8%
43.	University of Missouri at Columbia	1,427	5.7%
44.	University of Maryland at College Park	1,417	3.8%
45.	Ohio University, main campus	1,392	8.9%
46.	University of Washington	1,377	3.9%
47.	Cornell University	1,342	7.8%
48.	Pennsylvania State University, main campus	1,335	3.6%
49.	University of Texas at Arlington	1,300	6.2%
50.	Purdue University, main campus	1,281	3.9%
51.	California State University at Fresno	1,277	7.8%
52.	University of Hawaii at Manoa	1,276	6.2%
53.	University of Iowa	1,253	4.6%
54.	University of Illinois at Chicago Circle	1,201	5.8%
55.	California State University at Long Beach	1,174	3.3%
56.	Arizona State University	1,162	3.1%
57.	Syracuse University, main campus	1,151	5.4%
58.	University of Toledo	1,150	5.4%
59.	Florida International University	1,136	9.9%
60.	University of Texas at El Paso	1,134	7.4%
61.	Wayne State University	1,122	3.6%
62.	Central State University (Okla.)	1,120	9.4%
63.	Utah State University	1,118	10.9%
64.	San Diego State University	1,080	3.0%
65.	State University of New York at Stony Brook	1,076	7.6%
66.	San Jose State University	1,064	4.1%
67.	United States International University	1,047	43.6%
68.	University of Oregon, main campus	1,041	6.2%
69.	Georgetown University	1,028	8.4%
70.	Portland State University	1,028	8.4%

† Includes basic skills, citizenship & civic activities, health-related activities, interpersonal skills, leisure & recreational activities, and personal awareness

Distribution by Field of Study

Field of study	1979-1980 Number of foreign students	1979-1980 Proportion of foreign students	1981-1982 Number of foreign students	1981-1982 Proportion of foreign students
Agriculture	8,750	3.1%	8,880	2.7%
Allied health	2,270	0.8%	3,090	1.0%
Architecture & environmental design	5,760	2.0%	6,340	1.9%
Area & ethnic studies	1,510	0.5%	2,280	0.7%
Business	48,370	16.9%	59,420	18.2%
Communications	2,790	1.0%	5,340	1.7%
Computer & information sciences	8,610	3.0%	15,690	4.8%
Construction trades	—	—	1,570	0.5%
Education	12,340	4.3%	12,410	3.8%
Engineering	66,090	23.1%	62,300	19.1%
Engineering related technologies	10,860	3.8%	11,350	3.5%
English language	12,170	4.2%	14,700	4.5%
Foreign languages	2,560	0.9%	3,150	1.0%
Health sciences	8,680	3.0%	8,480	2.6%
Home economics	1,550	0.5%	2,680	0.8%
Industrial arts	—	—	520	0.2%
Interdisciplinary studies	6,590	2.3%	4,280	1.3%
Law	1,080	0.4%	1,790	0.5%
Letters	5,070	1.8%	6,300	1.9%
Liberal & general studies	—	—	5,530	1.7%
Library & archival sciences	590	0.2%	630	0.2%
Life sciences	9,100	3.2%	9,550	2.9%
Mathematics	5,370	1.9%	6,930	2.1%
Military technologies	—	—	210	0.1%
Parks & recreation	—	—	110	—
Personal & social development †	—	—	290	0.1%
Philosophy & religion	—	—	610	0.2%
Physical sciences	11,030	3.8%	14,190	4.4%
Protective services	—	—	430	0.1%
Psychology	2,740	1.0%	3,340	1.0%
Public affairs	3,730	1.3%	2,900	0.9%
Science technologies	1,750	0.6%	1,130	0.3%
Social sciences	14,550	5.1%	16,140	5.0%
Theology	3,710	1.3%	2,750	0.8%
Visual & performing arts	8,590	3.0%	8,330	2.6%
Undeclared	20,130	7.0%	22,660	6.9%
Total	**288,340**	**100.0%**	**326,300**	**100.0%**

Where They Come From

Rank	Country or territory	Students	Rank	Country or territory	Students
1.	Iran	35,860	26.	France	2,990
2.	Taiwan	20,520	27.	Turkey	2,940
3.	Nigeria	19,560	28.	Libya	2,900
4.	Canada	14,950	29.	Brazil	2,820
5.	Japan	14,020	30.	Israel	2,550
6.	Venezuela	13,960	31.	Jamaica	2,430
7.	India	11,250	32.	Cuba	2,220
8.	Saudi Arabia	10,220	33.	Panama	2,160
9.	Malaysia	9,420	34.	Kenya	2,080
10.	Hong Kong	8,990	35.	Egypt	2,080
11.	Republic of Korea	8,070	36.	Peru	1,850
12.	Mexico	7,890	37.	Singapore	1,840
13.	Lebanon	6,800	38.	Ghana	1,830
14.	Thailand	6,730	39.	Ethiopia	1,760
15.	Jordan	6,180	40.	Bangladesh	1,610
16.	United Kingdom	5,540	41.	Iraq	1,600
17.	Vietnam	4,940	42.	Australia	1,550
18.	China	4,350	43.	El Salvador	1,550
19.	Colombia	4,310	44.	Trinidad & Tobago	1,490
20.	Greece	4,220	45.	Italy	1,450
21.	Indonesia	4,070	46.	Pacific Islands	1,450
22.	West Germany	3,640	47.	Netherlands	1,360
23.	Pakistan	3,500	48.	Argentina	1,340
24.	Philippines	3,410	49.	South Africa	1,330
25.	Kuwait	3,330	50.	Ecuador	1,310

SOURCE: INSTITUTE OF INTERNATIONAL EDUCATION

France

Continued from Preceding Page

such as Lyons and Rouen, many faculty members refused to hold classes. In others, they met their classes but used the opportunity to inform students of their grievances with the government.

At some universities, the strike was carried on to a second day. In Paris, several hundred junior faculty members from various campuses of the University of Paris held a demonstration in the main courtyard of the Sorbonne. Many of them complained about the need to protest in public against the actions of a Socialist government that had previously promised to meet many of the unions' demands.

Government officials appeared surprised at the extent of faculty support for the strike. Mr. Payan tried to defuse the conflict by describing the unions' reactions to his proposals as being based on a "misunderstanding." He said that the faculty unions generally had supported government proposals for reforms in other areas of higher education.

However, after the demonstration in Paris, the ministry announced that there would be further discussions of the reforms of the academic career structure, and that new proposals would be put forward "different from those which have just been announced."

West Bank

Continued from Preceding Page

tion against foreign faculty members whose visas are due to expire soon.

However, the authorities reportedly had summoned six such professors from Bethlehem University, including three Americans, to a meeting last week.

Meanwhile, in Amman, Jordan, King Hussein last week praised faculty members and students at the West Bank institutions for their "steadfastness" against the Israeli occupation. He was speaking at a conference of the P.L.O.'s Higher Council for Education and Culture.

In elections last week at An-Najah University on the West Bank, all nine seats on the student council were won by the United Student Front, a Palestinian nationalist organization that has generally supported the policies of Yasir Arafat, the P.L.O. leader.